

ABSTRACT

The invention relates to a heating and air conditioning plant for motor vehicles. The plant includes an evaporator to create cold air, a heating heat exchanger to create warm air, a mixing space to mix warm and cold air in direction of flow of the air channel system and from which the air is directed to the air conditioning zones to be differently tempered through suitable air directing devices and air outlet devices. In longitudinal direction of the vehicle, the evaporator is arranged longitudinal in the bottom region of the instrument panel center console and connected via the air directing channel system to the heating heat exchanger positioned above the evaporator and oriented almost horizontal. The air mixing chamber is configured as parallel-symmetric air guiding system with trapezoidal ducts to deviate the air flows for the left and right air outlets above the heating heat exchanger. A separating wall, impermeable to humidity and air, extends over the width of the heating heat exchanger and a part of the mixing space.